

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A device comprising:

an emitter electrode;

a resistor layer;

~~a patterned~~ an electrically conductive seed layer overlying part of the resistor layer,
the seed layer including a plurality of laterally separated sections;

a dielectric layer overlying the resistive layer;

a gate electrode overlying the dielectric layer above the resistive layer and having
lateral edges in approximate vertical alignment with lateral edges of the
dielectric layer; and

a carbon based electron-emissive element (a) positioned over the sections of the seed
layer above the emitter electrode and (b) situated in a composite opening
extending through the gate electrode and the dielectric layer.

2. (Currently amended) A device comprising:

~~a group of laterally separated~~ an emitter electrodes electrode;

an electrically resistive layer overlying ~~parts of~~ at least a portion of the emitter
~~electrodes~~ electrode;

a dielectric layer overlying the resistive layer;

a plurality of laterally separated gate electrodes overlying the dielectric layer above
the resistive layer; and

a multiplicity of electron-emissive elements (a) ~~positioned over a patterned seed layer~~
grown from a seed layer that includes a plurality of unconnected sections
above the emitter electrode ~~electrodes~~ and (b) situated in composite openings
extending through the gate electrodes and the dielectric layer.

3. (Original) A device as in Claim 2 wherein the dielectric layer comprises a dual

layer of silicon nitride and silicon dioxide.

1 4. (Currently amended) A device as in Claim [[3]] 2, wherein the dielectric layer
2 comprises a single layer of silicon nitride.

1 5. (Currently amended) A device as in Claim [[3]] 2, wherein the dielectric layer
2 comprises a single layer of silicon dioxide.

1 6. (Original) A device as in Claim 2 wherein the multiplicity of electron-emissive-
2 elements comprise carbon.

1 7. (Original) A device as in Claim 6 wherein the multiplicity of electron-emissive-
2 elements are filaments.

1 8-9. (Canceled)

1 10. (Currently amended) A device as in Claim [[9]] 2, wherein ~~said group of electron-~~
2 ~~emissive elements defines a pixel~~ the electron-emissive elements positioned over at least two
3 sections of the seed layer defines a single pixel of a display system.

1 11. (Currently amended) A device as in Claim 10, wherein the electron-emissive
2 elements are allocated into a number of laterally separated sets, each set comprising multiple
3 electron-emissive elements, ~~at least one of the set~~ overlying at least one of the sections of the
4 seed layer ~~each conductive strip.~~

1 12. (Canceled)

1 13. (New) An electron-emitting device comprising:
2 an emitter electrode;
3 a gate electrode;

4 a plurality of groups of electron-emissive elements situated in one or more openings
5 in the gate electrode; and
6 a seed layer including at least two laterally separated sections, each section of the
7 seed layer electrically coupled between one or more groups of electron-
8 emissive elements and the emitter electrode.

1 14. (New) The device of claim 13, further comprising:
2 an electrically resistive layer overlying at least a portion of the emitter electrode, the
3 electrically resistive layer electrically coupled in series between the emitter
4 electrode and the seed layer.

1 15. (New) The device of claim 14, further comprising:
2 a dielectric layer disposed between the electrically resistive layer and the gate
3 electrode.

1 16. (New) The device of claim 15, wherein the dielectric layer comprises silicon
2 nitride.

1 17. (New) The device of claim 15, wherein the dielectric layer comprises silicon
2 dioxide.

1 18. (New) The device of claim 15, wherein the dielectric layer comprises a layer of
2 silicon nitride and a layer of silicon dioxide.

1 19. (New) The device of claim 13, wherein the electron-emissive elements comprise
2 carbon.

1 20. (New) The device of claim 13, wherein the electron-emissive elements comprise a
2 number of carbon filaments.

1 21. (New) The device of claim 13, wherein the sections of the seed layer
2 symmetrically over-align with the openings of the gate electrode.

1 22. (New) The device of claim 13, wherein multiple sections of the seed layer
2 correspond to a single pixel of a display system.

1 23. (New) The device of claim 13, wherein multiple sections of the seed layer
2 correspond to a single color for a pixel of a display system.